

Abstract Of The Disclosure

A polymer electrolyte fuel cell including: a hydrogen ion conductive polymer electrolyte membrane; a pair of electrodes sandwiching the membrane; a pair of conductive separators each having a gas flow channel, one of which supplies a fuel gas to one of the electrodes and the other supplies an oxidant gas to the other electrode; and gaskets, each of which is sandwiched between the conductive separator and the hydrogen ion conductive polymer electrolyte membrane to surround the periphery of the electrode and the gas flow channel, wherein a gram of the conductive separator or the gasket, which is kept immersed in water of 80 to 100°C for 50 hours, leaches into the water not more than 300 μg of TOC, not more than 50 μg of ammonium ion, not more than 50 μg of chloride ion, not more than 20 μg of bromide ion and not more than 10 μg of sulfurous acid ion.